



DEPARTMENT OF THE ARMY
OFFICE OF THE SURGEON GENERAL
5109 LEESBURG PIKE
FALLS CHURCH, VA 22041-3258

REPLY TO
ATTENTION OF

DASG-IMD

1 November 2004
Updated: 29 August 2005

AHLTA SOP #4
End User Devices

1. PURPOSE: To clearly define minimum and specifications for End User Devices using AHLTA and how devices purchased for AHLTA will be deployed for utilization.

2. REFERENCES:

- a. Tri-Service End User Device Placement Criteria
- b. Military Health System Portable Computing Devices Configuration Guidance

3. SCOPE: This SOP applies to all members of the AHLTA Program Office and all AMEDD sites implementing AHLTA. The SRP recommendations are based upon review of multiple SRP sites. SRP workflow was compared to present and future AHLTA capabilities including the Individual Medical Readiness (IMR) Module and automated clinical practice guidelines (aCPG).

4. DEFINITIONS:

a. EUD - End User Device. These are comprised of workstations, monitors and printers (local and network). EUDs are identified by number and location by the Functional Site Survey, validated by this office and reviewed with the deployment site leadership. There is no present survey plan for SRP sites.

b. Tablet PC – A convertible or slate either running Windows XP Pro Tablet PC Edition or with touchscreen capability

(1) Slate – A Tablet PC consisting of a display screen and no attached keyboard. The slate can be connected to a docking station to include keyboard and mouse.

(2) Convertible – A laptop computer with a display screen that can rotate 180 degrees and closed, converting the laptop to a slate configuration.

5. Currently the EUD criteria are as follows:

- a. Minimum PC specifications to use AHLTA:

(1) 512 MB RAM

(2) 450 MHz Processor Speed

- (3) 10 GB hard drive with 2 GB free
- (4) Network Connection
- (5) CD-ROM (The server can be used instead. This is NOT a CD/RW.)
- b. Minimum specifications for Tablet PC (convertible or slate):
 - (1) 1 GB RAM
 - (2) 866 MHz processor speed
 - (3) 20 GB hard drive
 - (4) CD-ROM and floppy drive optional
 - (5) Docking station optional for convertible, required for slate (to include USB keyboard)
 - (6) Network Connection
 - (7) Smart Card Reader – Internal or USB External
 - (8) USB Mouse
 - (9) Microsoft Windows XP Pro Tablet PC
 - (10) One (1) Type I or Type II PCMCIA I/O slot
 - (11) Two (2) USB I/O slots
 - (12) TFT Color LCD with 16 MB video RAM, capable of 1024x768 resolution
 - (13) Lithium-Ion battery (6-cell, 4.5 hour life) and Universal AC adapter
- c. See Appendix A for Contract Line Item Number (CLIN) descriptions of current EUDs.

6. Number, Type, and Location of Computers: A functional site survey will be conducted at each site to determine the total number of EUDs needed for that site. The functional site survey is based upon established Tri-Service device placement criteria which specify number and location for devices (as well as infrastructure needed to support them). The functional survey also identifies those EUDs that are at the site and meet present device requirements. Those EUDs meeting the above

requirements will NOT be replaced but will fall into the AHLTA lifecycle management program. Any alteration of the number of EUDs must be approved by the AMEDD AHLTA Program Manager. For selected and designated areas Tablet PCs (convertibles with USB mouse and slates with docking station) may be substituted for normal desktop PC. Outside the designated areas the delta cost of the Tablet PC verse the standard desktop cost will be at MTF expense.

a. Offices of providers who work out of multiple exam rooms – Tablet PC (slate with docking station or convertible with CD-ROM) (Currently capped at \$2,200 per EUD with sites assuming responsibility for costs that exceed that cap)

b. Clerical areas, exam rooms and administrative areas - Desktop PCs.

c. Emergency Room Configuration

(1) Provider offices – Tablet PC (slate with docking station or convertible with CD-ROM)

(2) Triage area – Tablet PC (slate with docking station)

(3) Tablet PC (convertible without CD-ROM) at head of each bay bed wired to LAN. Note: Recommended telescoping arm mounts at MTF expense

(4) Tablet PC (convertible without CD-ROM) in each ER exam room wired to LAN

(5) Clerical and administrative areas will still receive standard desktop PC

(6) One consultant slate with docking station for each 4 bay bed bays for “consultant work area” in ER

d. Cast Room - Tablet PC (convertible without CD-ROM) wired (1/2 the number of standard PC); Desktops in all other areas

e. Physical Therapy bay - Tablet PC (convertible without CD-ROM) wired (1/2 the number of standard PC); Desktops in all other areas.

f. SRP Stations (all computers are Desktops):

(1) Check-in Station:

(a) Three (3) PCs

(b) Two (2) network printers

(c) Purpose: Patient check-in at SRP site and creation of an appointment for the SRP visit.

(2) Record Screening / Orders Initiation Station

(a) Ten (10) PCs

(b) No printers

(c) Purpose: Staff opens IMR and/or aCPG identifying readiness items that require updating. Items requiring updating are ordered in AHLTA. Paper tracking sheet completed and handed to soldier indicating stations that soldiers must visit and action needed. Soldier completes Pre-/Post-deployment screening on computer (Note: Future plan is to be able to import this data from a handheld device).

(3) Optometry (Visual Screening) Station:

(a) Two (2) PCs

(b) No printers

(c) Purpose: Document data on visual screening. Order Consults if needed.

(4) LAB – Blood Draw Station:

(a) This remains a CHCS Legacy function

(b) No PCs or printers.

(c) Purpose – Access and document labs/test drawn.

(5) Immunization Station:

(a) Four (4) PCs

(b) No printers

(c) Purpose – Administer and document all immunization utilizing the AHLTA Immunization module and documenting immunization give in the A/P tab of AHLTA.

(6) Hearing Screening Station (if hearing booth present at site):

(a) One (1) PC

(b) No printers

(c) Purpose – Document hearing status as required.

(7) Dental Station: Presently no AHLTA deployment pending release of AHLTA dental application

(8) Provider/Interview Station:

(a) Eight (8) PCs

(b) No printers

(c) Purpose – Review pre-/post-deployment survey. Review medical history and entry consult/test as appropriate. Document and sign encounter upon completion.

(9) Checkout Station:

(a) Four (4) PCs

(b) Two (2) high-volume printers.

(c) Purpose: Open IMR module and validate 100% “go” status or provide follow-up instruction after completion of consults/test.

(10) Briefing Room: No AHLTA PCs or printers.

g. All other areas receive Desktop PC.

7. Other equipment deployed to support AHLTA:

a. Printers: The AMEDD deploys one (1) printer for every ten (10) PCs. Only network printers may be used. The areas specified below must receive a printer for placement in that area. The site may determine how best to deploy the remaining printers in support of its local mission as long as the printers are in support of AHLTA use/deployment. Sites may discuss with the AMEDD office if the number of printers exceeds their needs. In this case funding may be shifted to computer cost. Mandatory printer locations include:

(1) Outpatient Clinic Check in Desk – One printer placed within arm’s reach of each clerical workstation at the desk.

(2) Outpatient Records Room

(a) High-volume printer – two printers per records room

(b) Outpatient Records Clerks – one printer per every two clerk workstations

(c) Correspondence section – one printer per every workstation that deals directly with patients. This will facilitate point of care service.

b. Draw Pads: USB draw pads to be used with AHLTA drawing tool and possibly for patient signature capture

(1) One (1) draw pad per exam room desktop PC

(2) One (1) draw pad per provider office desktop PC

(3) One (1) draw pad per clinic check-in computer

(4) MTF may desire to purchase more sophisticated draw pads for eye clinics

(5) Draw pads are not covered by warranty or replaced via central funds except as defined by CONOPS at time of refresh

c. Scanners: See scanner policy (SOP 09)

8. Rationale for Change to Tablet PC: Tablet PC offers some inherent workflow advantages and will begin a vital step toward wireless access availability for those select users who will benefit from wireless. Finally, to help meet information assurance issues the deployment of government mobile PCs to individual who may need remote access is beneficial. Following are a few considerations of Tablet verse desktop use.

a. Advantages

(1) Use of inherent touchscreen capability

(2) Use of inherent handwriting recognition for free text entry into appropriate comment boxes

(3) Small size

(4) Possibility of use of dictation, although involves provider training of the application for improved accuracy.

(5) User acceptance (user-dependent)

(6) Speed of documentation (user-dependent)

(7) Opportunity for provider to have remote access to AHLTA using government PC increasing Information Assurance compliance.

(8) Begins to facilitate opportunity for clinic wireless use where provider could be wireless while support staff continues to use PC wired to LAN. This decreases issues with multiple logon to a PC, and provides backup for wireless access and battery life issues.

b. Disadvantages

(1) Replacement cost of mouse and stylus are MTF Cost

(2) Possible inappropriate use of dictation/free text that would limit the benefit of an EMR and negate the ability of AHLTA to code the visit

(3) Logistical control of multiple mobile computers

(4) Durability

9. Policy:

a. Cost per unit: See Appendix for current EUD pricing. Includes on-site warranty service for 4 years and refresh with technology available at the four-year mark by TMA. Any device that meets these criteria and therefore doesn't need to be replaced is "picked-up" on the TMA list as a AHLTA device that will be "refreshed" at TMA expense with all other devices. Generally, if a device is older than 30 months at time of FSS, it is replaced during EUD deployment.

b. EUD Installation and Testing – As part of the central deployment process, the installation, to include data transfer and testing of the computer image, is paid for by the central program office. This process is done to ensure that the individual medical care system functions appropriately. This installation and data migration can usually be scheduled around normal clinic hours or in a manner to minimize clinical disruptions.


c. Sites may require a different brand than Dell (for PCs) or Fujitsu (for Tablets) due to local on-site support or location preference based upon current holdings. If an alternate brand that meets a site's requirements is available, it will be acquired incorporating the same specifications as those above. If such a brand is not currently on the approved TIMPO list (Contract Line Item Number or "CLIN") for purchase, TIMPO will be asked to price the product with identical specifications and to determine brand compatibility with AHLTA. The Director shall make a determination if the cost difference in price shall be borne by the AMEDD or by the site. Except in extremely unique circumstances, this extra expense will be borne by the site.

d. Sites may augment, but may not degrade, those above, as each has been determined to be an essential requirement to optimize use of AHLTA. Any augmentation is a "one-time" addition that must be provided in writing by the hospital commander. Compatibility will be certified by TIMPO for all augmentations. The cost for all augmentations will be borne by the hospital (MEDCOM policy).

e. Sites may request changes to device placement based upon local mission if the area involved is not covered in the Tri-Service or the AMEDD-specific device placement criteria. Requested changes should be made in writing at the time of functional survey review.

f. Sites will place the EUDs purchased for AHLTA Implementation into the areas specified by the functional survey. Tablets must be placed in the location specified. If a provider's computer is not being replaced, the site may relocate the existing provider computer. For patient safety, the contractor will be allowed to deploy and test each device. Computers that are being replaced will remain the property of the MTF to be used at its discretion. Since AHLTA devices are under lifecycle replacement for the purpose of clinical care, AHLTA EUDs must remain in clinical care and specified administrative areas as defined by the placement criteria.

10. Proponent for this SOP is the Program Office Director at Commercial 706-787-7165 or DSN 773-7165.



RON MOODY, M.D.
LTC, MC
Program Director
AMEDD AHLTA Implementation and Clinical
Integration Office

Appendix A

Contract Line Item Number (CLIN) Descriptions of current EUDs (DRAFT)

1. Desktop PC - Dell Small Form Factor - \$1,199 plus GSA fee: \$1,222.98
 - A. 512 MB RAM
 - B. 2.8 GHz processor speed
 - C. 80 GB hard drive
 - D. CD-ROM
 - E. Network Connection
 - F. 17" Flat Panel Monitor
 - G. USB Smart Card Reader/Writer – External
 - H. Microsoft Windows XP Pro with Media and NTFS
 - I. ActivCard Gold 3.0 Package
2. Tablet PC
 - A. Convertible – Fujitsu T4020 – \$2,137 plus GSA fee (50 units)
 - 1) Intel® Pentium® M Processor 740 1.73 GHz, 2 MB L2 cache, 533 MHz FSB
 - 2) Microsoft® Windows® XP Tablet PC Edition 2005 with Microsoft® Office OneNote® 2003
 - 3) 12.1" XGA TFT indoor display
 - 4) Two (2) 512MB memory modules for total 1 GB RAM
 - 5) S-ATA 150; 5400 rpm; shock-mounted 40 GB hard drive
 - 6) Optional Modular DVD/CD-RW Combo Drive
 - 7) Internal modem
 - 8) 10/100/1000 Base-T/Tx Ethernet
 - 9) Atheros Super AG® wireless LAN (802.11a/b/g)
 - 10) CLIN: AE21J1A993C31000
 - B. Slate – Fujitsu ST5032 - \$2,914 plus GSA Fee (50 units)
 - 1) Intel® Pentium® M Processor 753
 - 2) Microsoft Windows XP Tablet PC Edition 2005 and Microsoft® Office OneNote® 2003
 - 3) 12.1" XGA TFT indoor/outdoor (Transmissive) display with 160° viewing angles
 - 4) USB Keyboard
 - 5) Tablet Dock with DVD/CD-RW Combo Drive and AC Adapter
 - 6) 512 MB memory module
 - 7) 40 GB ATA 100 (5400 rpm) shock mounted hard drive
 - 8) Atheros Super AG® wireless LAN (802.11a/b/g)
 - 9) No Floppy Disk Drive; No Mouse

3. Draw Pad – WACOM Technologies Intuos3 4x6 - PRICE PENDING
4. Scanner – Hewlett Packard ScanJet SJ5590 - \$391 plus GSA Fee

Appendix B

EUD Repair during the Warranty Period

For any EUD that fails after installation, a trouble call shall be initiated with the local site Help Desk in accordance with local procedures. If the problem cannot be resolved locally by the site Help Desk, the customer (or local Help Desk, as local policy dictates) should call the MHS Help desk Line at 800.600.9332 to submit a trouble call. The MHS Help Desk will log the trouble call and handle all coordination with the site for repair.

1. EUD's that fail during the installation: Installing contractor will be responsible for getting the EUD repaired, not the site.
2. EUD's that fail after installation: A trouble ticket call shall be initiated with the MTF's Help Desk policy.
 - When opening a ticket, provide all the site information to include POC, telephone number and e-mail address, plus the serial number and or tag number of the Central Processor Unit of PC's or Printer that is need repair.
3. If the problem cannot be resolved locally by the site Help Desk for MHS EUD's, then the local Help Desk shall open a Trouble Ticket with the MHS Help Desk at 800.600.9332, or email at chcs2help@mhs-helpdesk.com.
4. MHS Help Desk will log the trouble call and will track the process until closure.
5. This is the single method to achieve warranty repair. If the site does not follow this process costs for repair will become the responsibility of the site or individual.
6. Abbreviations:
 - End User Devices (EUD's) include personnel computers, monitors, printers and/or any other piece of equipment purchased centrally by the MHS AHLTA Program Office.